

ABSTRACT OF THE DISCLOSURE

An optical signal quality degradation monitoring apparatus for monitoring an optical wavelength division

5 multiplex signal is implemented in a small size. To monitor the optical signal quality degradation in the optical wavelength division multiplex signal by a configuration as simple as possible, the following

10 configurations are used: A configuration using an optical wavelength division demultiplexer and a sampling clock generator to make one an electric signal processor; A configuration using an optical sampling pulse train generator, an optical multiplexer, a nonlinear optical medium, and an optical wavelength division demultiplexer

15 to make one an electric signal processor; or a configuration using a selection wavelength control section, an optical wavelength selecting section, and a sampling clock generator to make one electric signal.